IDAHO FARM ENERGY ASSOCIATION

March 8, 2006

Jean Jewell
Commission Secretary
Idaho Public Utilities Commission
472 W. Washington St.
Boise, ID 83702-5983

Re: Comments on PAC-E-05-09

Dear Ms. Jewell:

The Idaho Farm Energy Association provides the following comments on the Amended Agreement filed with the Commission on January 27, 2006 in the above-referenced matter. The Idaho Farm Energy Association is a nonprofit corporation formed in January 2006 to promote rural economic development through on-farm renewable energy projects in the State of Idaho. On-farm renewable energy projects can shelter consumers from rising fuel prices, contribute to local economies, provide direct income for farmers and ranchers, increase diversity of fuel supply, and reduce our dependence on foreign fuels.

We support approval of the Schwendiman Amended Agreement and view its modified 90/110 banding mechanism as a significant improvement over the prior version of the band. However, the methodology used to separate the capacity and energy price components in this Amended Agreement contains an important error which must be corrected if these new contract terms are to be applied to other projects. In addition, we believe that the 90/110 performance band remains an unjustified reduction from full avoided cost prices. We also object to the failure of the methodology to recognize that deliveries below the 90% band still have capacity value.

Rather than persisting with the 90/110 banding requirement, we believe all parties would be better served by requiring that wind projects provide forecasts from pre-approved advanced forecasting services. This is the best way to minimize the cost of integrating wind energy.

1. Non-Conforming Energy Price Calculation is Erroneous

The "non-conforming energy" price is too low because it fails to include the full value of variable operations and maintenance costs for the surrogate avoided resource. A portion of variable O&M costs were included in the capacity component of the published rates, which has the

515 N. 27th St.
Boise, ID 83702

P 208-859-1882
F 208-495-1555

effect of reducing the energy component (and thus the non-conforming energy price).

Specifically, all of the variable O&M up to the capacity factor of the peaking resource has been allocated to capacity. Therefore, the equivalent amount of energy from the SAR combined cycle would have no variable O&M in its avoided energy costs. This cannot be correct. If this energy is displaced by wind deliveries, every kWh delivered would save variable O&M at the SAR. Variable O&M is defined as O&M costs which vary with the number of kWh generated.

It is important to note that all of the variable O&M of the peaking resource is assigned to capacity, not just the difference in variable O&M between the peaking resource and the SAR. In fact, since the variable O&M of the peaking resource is higher than the SAR this has an even greater impact on the number of kWh with no associated variable O&M. The attached report of Dr. Don Reading is incorporated by reference to these comments, and provides a more detailed explanation of this error.

In essence, only the fixed costs of a peaking resource should be included in the capacity component. All variable costs should be allocated to the energy component. Obviously variable O&M costs, by definition, are not fixed costs. Simply put, variable O&M costs are more akin to fuel costs than capital costs.

The significance of this error is directly related to the assumed capacity factor of the peaking resource. In the case of Pacificorp, the assumed capacity factor is 18%. While this error has a modest impact on the non-conforming energy price under the Amended Agreement, it would have a much more significant impact if applied to Idaho Power, which assumes a 59% capacity factor, as noted in Dr Reading's letter.

Dr. Reading confirmed that Pacificorp included a portion of variable O&M in capacity in its avoided cost filings in Oregon and Utah. However in both cases, this was not an important issue. In those jurisdictions, the division between capacity and energy is only used to allocate the total avoided costs to different time of delivery periods. Thus, in those other states, the error was harmless because it did not reduce total average price.

However in the Amended Agreement, this erroneous allocation has a very real impact on the actual price paid for non-conforming energy. Any variable costs allocated to capacity prices unfairly reduces the non-conforming energy price. Unlike in Oregon and Utah, this issue has significant relevance to total average price.

The Amended Agreement is signed, final, and should be approved. However, the Commission should make specific findings that the exclusion of variable O&M costs from the energy-only value of the published rates is inappropriate and should not be repeated for future contracts.

2. Deliveries Below 90% Deserve Some Capacity Credit

Even if a wind project delivers less than 90% of its projected output, its deliveries still improve system reliability. That is, it still has capacity value. By way of example, if a utility-owned resource suffers a major forced outage -- or there is a lack of hydro resource -- those resources are not removed from ratebase. The utility will still receive full compensation for building the project even though it has failed to meet its projected performance. Unlike a utility owned resource, the wind project is only paid for what it delivers; however, failing to meet the 90% standard does not mean that deliveries below 90% should not receive some capacity credit.

3. The Amended Agreement Is An Improvement, but the 90/110 Performance Band Continues To Be An Inappropriate Policy

The modified form of the 90/110 band reflected in the Amended Agreement is an improvement over the market-based non-conforming energy price set in prior standard PURPA contracts approved by the Commission. Future PURPA projects in each utilities' service territory should have the *option* of choosing the terms of the Amended Agreement (with the variable O&M correction discussed above).

However, we believe the Commission should more strongly encourage and provide guidance to utilities and wind projects to develop contract terms that are "similarly rigorous" to the 90/110 band. Order 29880.

The Commission has heard the criticisms of the 90/110 band. The simple fact is that no wind forecasting technology exists to provide a forecast of monthly production within 10% accuracy a quarter in advance. Nor is such information valuable to operating the utility system. The 90/110 mechanism simply serves to reduce prices from full avoided costs. We believe this is forbidden by PURPA, and that better alternatives can be found.

Wind forecasts, like hydro forecasts, are exponentially more accurate in the near term. In the time horizons actually used by utilities for operational planning (such as real time and day ahead markets), high quality wind forecasts are available. Utilities are far better served by near term forecasts with higher accuracy than speculative forecasts three months in advance. Moreover, the 90/110 band drives wind projects to provide artificially low forecasts to utilities, undercutting the very purpose of its existence.

In Order 29880 (at page 3), the Commission stated that the 90/110 band serves as an "incentive for the QF to make the most reliable estimates possible." In fact, the band serves as an incentive for the project to submit artificially low forecasts. At higher penetrations of wind energy on the grid, this could create a situation where utilities are securing power on the market or allocating resources unnecessarily – a poor outcome for ratepayers.

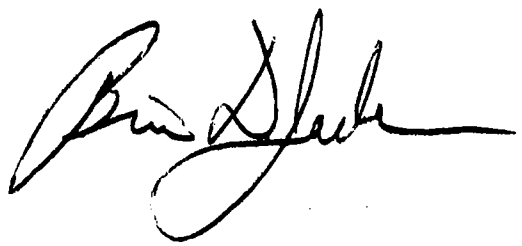
We believe that new non-price terms can be developed to the advantage of utilities and wind developers. We suggest the Commission favorably recommend that utilities and developers carefully explore replacing the 90/110 band with a combination of the new, high resolution short-term forecasting services which have become available and the mechanical availability guarantee ("MAG"). Using these third party forecasting services has become increasingly common in the industry. This will provide utilities with the most accurate forecast of wind production for use in operational planning and resource dispatch. This was the Commission's primary goal in using the 90/110 band.

If desirable, longer term forecasts can still be provided for a utility's strategic planning process, but without the pricing terms that have created an incentive for wind projects to submit artificially low forecasts. Also, including the MAG provision ensures that a project's operator is focused on doing the best possible job with those things that can be controlled.

We submit that professional, independent forecasts and the MAG, taken together, are "similarly rigorous" compared to the 90/110 band. In fact, they should provide far more useful information for operational planners. Short term forecasts from experienced firms have a high degree of accuracy, and long term forecasts, if needed, will not be skewed downward due to the wind projects' natural tendency to hedge against the 90/110 band. The MAG provision will ensure a high degree of project availability and maximum energy deliveries.

Thank you for your consideration of these comments.

Sincerely,



Brian Jackson
President, Idaho Farm Energy Association

Cc:

Lisa Nordstrom
Dean Brockbank
PacifiCorp
825 NE Multnomah, Suite 1800
Portland, OR 97232

Bruce Griswold
PacifiCorp
825 NE Multnomah, Suite 1800
Portland, OR 97232

Dean J. Miller
McDevitt & Miller LLP
P.O. Box 2564
Boise, ID 83701

PRINCIPAL OFFICES:
2252 KILLEARN CENTER BLVD.
TALLAHASSEE, FLORIDA 32309
850-893-8600
FAX 850-668-2731

March 8, 2006

ECONOMIC RESEARCH
AND ANALYSIS

Ben Johnson® Associates, Inc

Brian Jackson
President
Idaho Farm Energy Association
515 N. 27th St.
Boise, ID 83702

Dear Mr. Jackson:

Your Association has asked me to review the calculations related to the price for Non-Conforming Energy in the Schwendiman wind energy contract and the implications of the modified 90/110 Performance Band mechanism. The following analysis indicates that the new mechanism is a major improvement over the existing mechanism. However PacifiCorp's method of calculation of the Non-Conforming Energy Price contains a significant theoretical flaw that needs be corrected before the mechanism is generally applied in future avoided cost calculations.

Modified 90/110 Performance Band

The Modified Band is superior to the current methodology because it eliminates market price risk from the contract. The forecast of revenues for the wind projects will be far less volatile because they are no longer exposed to natural gas prices. For the ratepayers, there will now be an economic incentive for accurate forecasting at all times. Under the current mechanism, there is no forecasting incentive when 85% of the prices at Mid-C exceed the contract price. This situation has occurred in the past.

The basis of fixed price contracts is to eliminate market price risks for both parties. The avoided costs represent a common view as to the long term cost of producing electricity. One problem with the current 90/110 mechanism is that it violated this basic compact. Rather than using the agreed upon prices, it uses market prices only if they are lower. The one-sided nature of this mechanism is unfairly biased against wind projects and artificially reduces supply. This in turn increases costs to ratepayers in the long run, since they will then buy more energy from less economic sources. The Modified Band returns to the common view of forecasted energy prices.

6070 HILL ROAD
BOISE, IDAHO 83703
208-342-1700
FAX 208-384-1511

VISIT OUR WEBSITES:
benjohnsonassociates.com
utilityregulation.com

ELECTRONIC MAIL:
staff@benjohnsonassociates.com

Non-Conforming Energy Price

PacifiCorp has used a common approach to dividing the total avoided cost, calculated with the SAR method, between capacity and energy. In jurisdictions which use time differentiated avoided costs, the value of reliability is separated from the value of energy. If the fixed cost of a combined cycle is used to price capacity, a competitive market could add an infinite number of simple cycle combustion turbines (SCCT) and the owners of those turbines would reap above market returns.

Hence, it is generally recognized that the fixed cost of owning the least cost peaking resource, such as an SCCT, is the appropriate proxy for pricing capacity, regardless of what type of power plant is used as the SAR.

With this approach all other costs of the SAR, including the balance of the capital costs, are allocated to energy. Essentially, any additional fixed costs of the SAR compared to the peaking resource is justified on the basis of operating cost savings.

If the additional capital costs of the combined cycle SAR are not allocated to the energy price, then only resources operating at or below the heat rate of the SAR would be economic. However, there are obviously times when peaking resources, such as Bennett Mountain, will operate even though their operating costs are higher. This can occur for a variety of reasons such as load balancing, mitigating transmission constraints, replacement of outages of other units, etc.. Adding the extra capital costs of the SAR to energy has the effect of increasing the energy price to account for periods when more expensive resources are operating.

PacifiCorp Methodology Error

There is a theoretical flaw in PacifiCorp's avoided cost calculation methodology. The Company includes variable O&M in the SCCT's fixed costs. While this is consistent with the way PacifiCorp calculates avoided capacity prices in Utah and Oregon, it is simply incorrect. In economic terms, the task here is to determine the change in cost due to a change in demand (kW). Operating costs (kWh) are not part of this calculation. The change in variable O&M due to a change in kW is zero. There is no justification for treating variable O&M costs differently than variable fuel costs.

In both Oregon and Utah, the avoided capacity price is simply used to allocate <u>total</u> avoided costs between time periods. Therefore, PacifiCorp's methodology does not reduce total avoided costs. It only shifts a minor amount of avoided costs between on-peak and off-peak periods. In the Schwendiman case, this flawed methodology reduces the price of Non-Conforming Energy. Therefore, it causes an unfair loss to the projects that will be subject to this approach.

Applying the Methodology to Idaho Power

The size of the PacifiCorp error is determined by the capacity factor assumed for the SCCT. PacifiCorp uses an 18% capacity factor based on their 2004 IRP Update. If this error isn't corrected, it will have a far larger impact if the method is applied to Idaho Power. Idaho Power assumes an SCCT capacity factor of 59% in their 2004 IRP. For 2006, the PacifiCorp calculation reduces the Non-Conforming Energy Price by 1.86 $/MWh. If applied to Idaho Power, the error will equal 2.80 $/MWh.

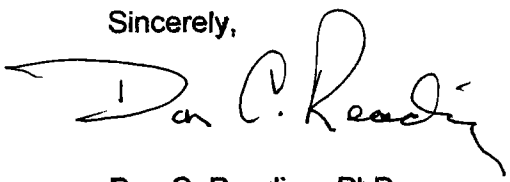
Attached is a calculation of Non-Conforming Energy Prices for Idaho Power using its 2004 IRP assumptions and eliminating variable O&M from capacity prices. To adjust for seasonal prices, I assumed that no avoided capacity costs be allocated to the three off peak months and that the Non-Conforming Energy Prices be assigned in the other two seasons. The result is that most of the difference in seasonal prices is assigned to capacity prices, which is logical.

It should be noted that there is a small rounding error when applying Idaho Power's normal seasonality factor to the March–May period. The actual factor is 73.33%, which has been rounded to 73.5% in the current SAR model.

Recommendation

The a theoretical flaw in PacifiCorp's avoided cost calculation methodology needs to be corrected for the reasons stated above. Variable O&M should not be included in fixed costs. In future contracts PacifiCorp needs to fix this error and the methodology should not be extended to Idaho Power, or any other utility without correction.

Sincerely,



Don C. Reading, PhD
Consulting Economist, VP

IDAHO POWER - SAR WITH PEAK CREDIT METHOD

Capacity Cost split by Bennett Mtn SCCT from 2004 IRP Study

$/MWH						
Year	CCCT Fixed Costs	SCCT Fixed Costs	Capitalized Energy	Fuel Costs	Total Fuel Costs	Total Avoided Cost
2006	13.61	6.59	7.01	37.89	44.91	51.50
2007	13.92	6.74	7.18	38.77	45.95	52.69
2008	14.24	6.88	7.36	39.66	47.02	53.90
2009	14.57	7.03	7.54	40.57	48.11	55.14
2010	14.91	7.19	7.72	41.50	49.23	56.41
2011	15.26	7.34	7.91	42.46	50.37	57.71
2012	15.61	7.50	8.11	43.43	51.54	59.04
2013	15.97	7.67	8.30	44.43	52.74	60.40
2014	16.34	7.83	8.51	45.46	53.96	61.80
2015	16.72	8.00	8.72	46.50	55.22	63.22
2016	17.11	8.18	8.93	47.57	56.50	64.68
2017	17.51	8.36	9.15	48.66	57.81	66.17
2018	17.91	8.54	9.37	49.78	59.16	67.70
2019	18.33	8.72	9.60	50.93	60.53	69.26
2020	18.75	8.92	9.84	52.10	61.94	70.85
2021	19.19	9.11	10.08	53.30	63.38	72.49
2022	19.64	9.31	10.33	54.52	64.85	74.16
2023	20.09	9.51	10.58	55.78	66.36	75.87
2024	20.56	9.72	10.84	57.06	67.90	77.62
2025	21.04	9.93	11.11	58.37	69.48	79.41
2026	21.53	10.15	11.38	59.72	71.10	81.25
2027	22.03	10.37	11.66	61.09	72.75	83.12
2028	22.54	10.60	11.95	62.49	74.44	85.04
2029	23.07	10.83	12.24	63.93	76.17	87.00
2030	23.61	11.06	12.54	65.40	77.95	89.01

IDAHO POWER - SAR WITH PEAK CREDIT METHOD

Allocation of Peak Credit to Seasonal Periods

CAPACITY PRICE			NON-CONFORMING ENERGY PRICE				TOTAL SEASONAL PRICE			
Mar-May 73.3% Mo: 3	Jun-Sep 120.0% 4	Oct-Feb 100.0% 5	Mar-May 73.3% 3	Jun-Sep 120.0% 4	Oct-Feb 100.0% 5	Wtd Avg 12	Mar-May 73.3% 3	Jun-Sep 120.0% 4	Oct-Feb 100.0% 5	Wtd Avg 12
-	14.51	4.21	37.77	47.29	47.29	44.91	37.77	61.80	51.50	51.50
-	14.84	4.30	38.64	48.39	48.39	45.95	38.64	63.22	52.69	52.69
-	15.17	4.39	39.53	49.51	49.51	47.02	39.53	64.68	53.90	53.90
-	15.50	4.48	40.44	50.67	50.67	48.11	40.44	66.17	55.14	55.14
-	15.85	4.57	41.37	51.85	51.85	49.23	41.37	67.70	56.41	56.41
-	16.20	4.66	42.32	53.05	53.05	50.37	42.32	69.26	57.71	57.71
-	16.56	4.76	43.30	54.29	54.29	51.54	43.30	70.85	59.04	59.04
-	16.93	4.85	44.30	55.55	55.55	52.74	44.30	72.48	60.40	60.40
-	17.31	4.95	45.32	56.85	56.85	53.96	45.32	74.16	61.80	61.80
-	17.70	5.05	46.36	58.17	58.17	55.22	46.36	75.87	63.22	63.22
-	18.09	5.16	47.43	59.52	59.52	56.50	47.43	77.61	64.68	64.68
-	18.49	5.26	48.52	60.91	60.91	57.81	48.52	79.40	66.17	66.17
-	18.91	5.37	49.64	62.33	62.33	59.16	49.64	81.23	67.70	67.70
-	19.33	5.48	50.79	63.78	63.78	60.53	50.79	83.11	69.26	69.26
-	19.76	5.59	51.96	65.27	65.27	61.94	51.96	85.03	70.85	70.85
-	20.20	5.70	53.16	66.79	66.79	63.38	53.16	86.99	72.49	72.49
-	20.65	5.82	54.38	68.34	68.34	64.85	54.38	88.99	74.16	74.16
-	21.11	5.94	55.64	69.93	69.93	66.36	55.64	91.05	75.87	75.87
-	21.58	6.06	56.92	71.56	71.56	67.90	56.92	93.15	77.62	77.62
-	22.07	6.18	58.24	73.23	73.23	69.48	58.24	95.30	79.41	79.41
-	22.56	6.31	59.58	74.94	74.94	71.10	59.58	97.50	81.25	81.25
-	23.06	6.44	60.96	76.68	76.68	72.75	60.96	99.75	83.12	83.12
-	23.58	6.57	62.36	78.47	78.47	74.44	62.36	102.05	85.04	85.04
-	24.10	6.70	63.80	80.30	80.30	76.17	63.80	104.40	87.00	87.00
-	24.64	6.84	65.27	82.17	82.17	77.95	65.27	106.81	89.01	89.01